

Strong and Electromagnetic Reaction Rate Bibliography

References preceded by a * here and in the matrix indicate rates derived from experimental data.

BBRT = Brehm, K., Becker, H.W., Rolfs, C., Trauvetter, H.-P., Käppeler, F., and Ratynski, W. 1988, *Z. Phys.*, **A330**, 167.

* BK = Bao, Z.Y., and Käppeler, F. 1986, *Atomic Data and Nuclear Data Tables*, **36**, 411.

* BPMWS = Beer, H., and Penzhorn, R.D. 1987, *Astron. & Astrophys.*, **174**, 323; and Macklin, R. L., Winters, R., and Schmidt, D.M. 1989, *Astron. & Astrophys.*, **216**, 109.

* BRVK = Beer, H., Rupp, G., Voss, F., and Käppeler, F. 1991, *ApJ.*, **379**, 420.

* CF = Caughlan, G.R., Fowler, W.A., 1988, *Atomic and Nuclear Data Tables*, **40**, 283.

* CFHZ = Caughlan, G.R., Fowler, W.A., Harris, M.J., and Zimmerman, B.A. 1985, *Atomic and Nuclear Data Tables*, **32**, 197. (See also OAP-400)

* FCZ2 = Fowler, W.A., Caughlan, G.R., and Zimmermann, B.A. 1975, *Ann. Rev. Astron. & Ap.*, **13**, 69.

* HFCZ = Harris, M.J., Fowler, W.A., Caughlan, G.R., and Zimmermann, B.A. 1983, *Ann. Rev. Astron. Astrophys.*, **21**, 165.

HW = Hoffman and Woosley 1991, (this work). See also Woosley & Hoffman 1992, *ApJ.*, **395**.

* KMAS^{1,2,3,4} = Kennett, S.R., Anderson, M.R., Mitchell, L.W., Switkowski, Z.E., and Sargood, D.G.:

KMAS¹ = 1980, *Nucl. Phys.* **A346**, 523.; KMAS² = 1981, *Nucl. Phys.* **A363**, 233.

KMAS³ = 1981, *Nucl. Phys.* **A368**, 337.; KMAS⁴ = 1982, *Nucl. Phys.* **A380**, 318.

KG89 = Käppeler, F., and Reffo, G. 1989, private communication.

* MKSTS = Mitchell, L.W., Kavanagh, R.W., Sevier, M.E., Tingwell, C.I.W., and Sargood, D.G. 1985, preprint UM-P-85/11.

* M88 = Macklin, R.L. 1988, *Nucl. Sci. Eng.*, **99**, 133.

OAP-422 = Woosley, S.E., Fowler, W.A., Holmes, J.A., and Zimmermann, B.A. 1975, *Tables of Thermonuclear Reaction Rate Data for Intermediate Mass Nuclei, Orange Aid Preprint OAP-422*, Kellogg Radiation Laboratory, Cal Tech. (unpublished).

* RK = Ratynski, W., and Käppeler, F. 1988, *Phys. Rev.* **C37**, 595.

SEW;RKW = Woosley, S.E.; Wallace, R.K., 1980. see OAP-422 eq. #30 for (p, γ),(p,n),(α ,p), and (α ,n) reactions, and eqs. #40 and #41 for (n, γ) reactions.

SEW89 = Woosley, S.E. 1989 (Rate based upon Hauser Feshbach calculation Aug. 1988).

* SRGD = Sargood, D.G., 1982, *Physics Reports*, **93**, #2, 61.

* SW = Schramm, D.N., and Wagoner, R.V. 1977, *Ann Rev. Nucl. Sci.*, **27**, 37.

* THTSMS^{1,2,3,4} = Tims, S.G., Hansper, V.Y., Tingwell, C.I.W., Scott, A.F., Morton, A.J., and Sargood, D.G.:

THTSMS¹ = 1988, *Nucl. Phys.* **A483**, 354. THTSMS² = 1989, *Nucl. Phys.* **A496**, 127.

THTSMS³ = 1989, preprint UM-P-89/30. THTSMS⁴ = 1991, *Nucl. Phys.* **A523**, 373.

THTSMS⁵ = 1991, *Nucl. Phys.* **A524**, 479. THTSMS⁶ = 1992, *Nucl. Phys.* **A537**, 167.

THTSMS⁷ = 1992, preprint UM-P-92/16. THTSMS⁸ = 1992, preprint UM-P-92/40.

* TMSS^{1,2} = Tingwell, C.I.W., Mitchell, L.W., Sevier, M.E., and Sargood, D.G.:

TMSS¹ = 1985, *Nucl. Phys.* **A439**, 371.; TMSS² = 1986, *Nucl. Phys.* **A454**, 128.

* WGTR = Wiescher, M., Görres, J., Thielemann, F.K., and Ritter, H. 1986, *Atsr. & Astrophys.*, **160**, 56.

WK = Wiescher, M., and Kettner, K-U. 1982, *Ap. J.*, **263**, 891.

WFHZ = Woosley, S.E., Fowler, W.A., Holmes, J.A., and Zimmermann, B.A. 1978, *Atomic Data and Nuclear Data Tables*, **22**, 371.

* WM = Winters, R.R., and Macklin, R.L. 1988, *Ap. J.*, **329**, 943.

WW = Wallace, R.K., and Woosley, S.E. 1981, *Ap.J. Suppl.* **45**, 389.

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3 α — Caughlan, G.R., Fowler, W.A., 1988, *Atomic and Nuclear Data Tables*, **40**, 283.

Branching ratios from FCZ 1975;

Neutron branching ratios from Dayras, Switkowski, and Woosley.

$^{12}\text{C} + ^{12}\text{C}$, $^{12}\text{C} + ^{16}\text{O}$, $^{16}\text{O} + ^{16}\text{O}$ Caughlan, G.R., Fowler, W.A., 1988, *Atomic and Nuclear Data Tables*, **40**, 283.

Tables 1-7 References

- 1) Anders, E. and Grevesse, N. 1989, *Geochim. Chosmochim. Acta.*, **53**, 197. Comparisons are made using the abundance data of Cameron, A.G.W. 1982, *Elemental and Nuclidic Abundances in the Solar System*, from "Essays in Nuclear Astrophysics" 1983, Cambridge University Press. Edited by C.A. Barnes, D.D. Clayton, and D.N. Schramm.
- 2) See Ground State Weak Decay Rate References below.
- 3) See Table 8, column (n, γ) and references above.
- 4) Fuller, G.M., Fowler, W.A., and Newman, M.J. 1985, *Ap. J.*, **293**, 1-16.
- 5) See references to *CF and *SW above.
- 6) Munakata, H, Yashuhara, K., and Itoh, N. 1985, *Ap. J.* **296**, 197 and errata (*Ap. J.* **304**, 580.) See also Beaudet, G., Petrosian, V., and Salpeter, E.E. 1967, *Ap. J.* **150**, 979(BPS).
- 7) Weak screening: Graboske, Dewit, Grossman, and Cooper 1973, *Ap. J.* **181**, 457. Strong screening: Alastuey, and Jancovici, 1978, *Ap. J.* **226**, 1034. Plasma parameters for strong screening are taken from Itoh, Totsuji, Setsuo, and Dewit 1979, *Ap. J.* **234**, 1079.

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